

ABSTRACT

A piezoelectric transducer comprises a piezoelectric component, an acoustic member attached to one of the surfaces of the piezoelectric component and a dampening material of low elastic modulus attached to one or both surfaces of the piezoelectric transducer. The piezoelectric component may comprise either an unimorph or a bimorph structure including a piezoceramic wafer made of lead zirconate titanate and a layer of dampening material sandwiched between the piezoelectric component and the acoustic member.

The acoustic member comprises a surrounding wall portion and an end portion which form an acoustic chamber when the member is mounted on a surface of the piezoelectric component. The end portion has an orifice to form a passageway from the chamber through the end portion to the outside of the member.